CLAIMS

1-29. (canceled)

30. (currently amended) A method for operating a fixed wireless loop system, comprising the steps of:

receiving a request by a first terminal to establish a first communications link; and

allocating at least two temporal communication slots to said first [[to]] terminal to support said first communications link when interference caused by and interference experienced by the first communications link are acceptably low.

31. (previously presented) The method of claim 1 further comprising the steps of:

estimating said interference caused by said first communications link using previously-obtained measurements of interference that other communications links experience from one another and from a transmitter of said first terminal;

estimating said interference experienced by said first communications link using previously-obtained measurements of interference that a receiver of said first terminal experiences from said other communications links.

32. (previously presented) The method of claim 31 wherein the step of estimating said interference caused by said first communications link and the step of estimating said interference experienced by said first communications link comprises accessing a data base comprising data indicative of mutual interference levels between every potential communications link within said fixed wireless loop system.

33. (previously presented) The method of claim 32 wherein:

said fixed wireless loop system comprises a plurality of cells, each of which comprises a base station and a multiplicity of terminals;

each communications link comprises a base station and one of said terminals within a same cell;

said first communications link is located in a first cell of said plurality;

at least one of said other communications links is located in a second cell of said plurality;

interference caused by said first communications link comprises interference experienced by said at least one other communications link; and

said step of estimating said interference caused by said first communications link comprises:

obtaining an estimate of a signal-to-total-interference-ratio experienced by said one other communications link from a cell controller controlling activities in said second cell, wherein said estimate does not include interference caused by said first communications link;

obtaining, from said data base, data indicative of interference experienced by said one other communications link as a result of communications between said first communications link; and

estimating interference experienced by a receiver of said one other communications link using said estimate of said signal-to-total-interference-ratio and said data from said data base.

34. (previously presented) The method of claim 30 wherein a receiver of said first communications link is located at a base station, and wherein the step of estimating said interference caused by said first communications link comprises estimating said interference based on a receive beam having notches to attenuate interference from at least some of said other communications links.

35. (previously presented) The method of claim 34 wherein said notches are characterized by a depth indicative of their ability to attenuate a signal, and wherein said step of estimating said interference caused by said first communications link further comprises using an estimated notch depth.

36. (previously presented) The method of claim 34 wherein said notches are characterized by a depth indicative of their ability to attenuate a signal, and wherein said step of estimating said interference caused by said first communications link further comprises using a calculated notch depth.

37. (previously presented) A method for allocating a time slot to a first communications link for wireless transmissions, wherein a second communications link also used the allocated time slot for wireless transmissions, comprising:

accessing first archived data pertaining to mutual interference between said first communications link and said second communications link;

accessing second archived data pertaining to the interference level experienced by said second communications link before said first communications link is established; and

allocating said time slot to said first communications link if the interference caused by and interference experienced by said first communications link are less than a predetermined level selected to provide suitable reception, as determined from said accessed first data and second archived data.

38. (currently amended) An article comprising:

a processor; and

a computer readable storage medium having computer-readable program code embodied therein for causing a processor to process a request by a terminal to communicate with a base station, the program code comprising:

code segment for causing said processor to search for a suitable uplink time slot in which said terminal transmits to said base station, wherein said suitable uplink time slot is characterized by:

a first level of ~~inteference~~ interference experienced at a receiver at said base station, said first level of interference allowing for satisfactory reception, and

a second level of ~~inteference~~ interference experienced at other on-air base stations, wherein:

said second level of ~~inteference~~ interference is caused by said requesting terminal's transmission; and

said second level of ~~inteference~~ interference allows for acceptable reception.

39. (currently amended) The article of claim 38 further comprising code segment for causing said processor to search for a suitable downlink time slot in which said base station transmits to said terminal, wherein said suitable downlink time slot is characterized by:

a third level of ~~inteference~~ interference experienced at a receiver at said terminal, said third level of interference allowing for satisfactory reception, and

a ~~foruth~~ fourth level of ~~inteference~~ interference experienced at other on-air terminals, wherein:

said third level of ~~inteference~~ interference is caused by said base station's transmission; and

said second level of ~~inteference~~ interference allows for acceptable reception.

40. (new) The method of claim 30 wherein:

the first communications link comprises an uplink beam and a downlink beam; and

the at least two temporal communication slots comprise at least one temporal communication slot in the uplink beam and at least one temporal communication slot in the downlink beam.

41. (new) The method of claim 30 wherein allocating the at least two temporal communication slots comprises the steps of:

determining that the interference caused by the first communications link is acceptably low; and

determining that the interference experienced by the first communications link is acceptably low.

42. (new) The method of claim 30 wherein:

the interference caused by the first communications link is interference to one or more other communications links in the system; and

the interference experienced by the first communications link is interference from one or more other communications links in the system.

43. (new) The method of claim 42 wherein each other communications link corresponds to a base station in the system different from the base station corresponding to the first communications link.